

STRAUB, F. Bruno, dr.; STEPHANECK, Ottilia; ACS, Gyorgy, dr.;  
SEMLEI, Camillo, dr.

Measurement of adenosine deaminase activity in blood plasma  
as tumor diagnostic test. Orv. hetil. 98 no.10-11:256-259  
17 Mar 57.

1. A Budapesti Orvostudományi Egyetem Orvosi Vegytani  
Intézete és Országos Onkológiai Intézet belosztályának  
közleménye.

(NEOPLASMS, diag.

adenosine deaminase determ. in blood plasma (Hun))

(AMIDASES, in blood

adenosine deaminase determ. in blood plasma in  
neoplasm diag. (Hun))

YUGOSLAVIA / Organic Chemistry, Synthetic Organic  
Chemistry.

G

Abs Jour : Ref. Zhur. - Khimiya, No. 15, 1958, No. 50362

Author : Stephonovitch, Tchelap, M.

Inst : -

Title : Synthesis of Tetrahydroquinoline 3 alkyl carbon-  
ates. II. Synthesis of 4-oxy- and 4-chloro-3-  
quinoline alkyl carbonates.

Orig Pub : Glasnyk Chem. Druzhstva, 1956, 21, #4, 213-218.

Abstract : Thermal decarboxylation of earlier described  
(see, article 1, R. J. Khim, 1955, 3770) 2 carboxy-  
4-oxy-3-quinoline alkylcarbonates (Ia-f) led to  
the formation of 4-oxy-3-quinoline alkylcarbon-  
ates (with good yields). Listed below are com-  
pounds and their M. P. in °C: IIa; 212; IIb,  
211; IIc, 177; IId, 174-175; IIe, 160-161 and

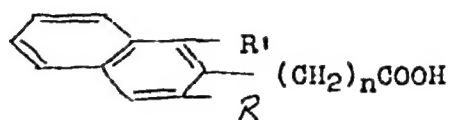
Card 1/3

YUGOSLAVIA / Organic Chemistry. Synthetic Organic  
Chemistry.

G

Abs Jour : Ref. Zhur. - Khimiya, No. 15, 1958, No. 50362

IIIf, 234; IIa-3 are transformed into non-hydro-  
lysable 4-chloro derivatives: (IIIa), 150; (IIIb)  
147; (IIIc) 113-114; (IIId) 125-127 and (IIIe)  
143, upon heating with  $\text{POCl}_3$ . When reacted with  
 $\text{POCl}_3$ , I didn't yield an analogous chloro deriva-  
tive. IIa-d, f could be crystallized from water,  
IIe and IIIa-e from diluted alcohol.



Card 2/3

MARINKOV, Lazar G.; MLADENOVIC, Milorad S.; ZUPANCIC, Mladen T.; STEPIC,  
Rista S.

Internal conversion spectrum of Pt-192 and Os-192. Bul Inst Nucl 10:  
7-13 Mr '60. (EEAI 10:5)

1. Institute of Nuclear Sciences "Boris Kidrich" Laboratory of  
Physics.  
(Spectrum analysis) (Magnetism) (Platinum) (Osmium)

STEPIC, Rista; MLADENOVIC, Milorad S.

The inclined source in the permanent magnet spectrometer. Bul Inst  
Nucl 10:175-176 Mr '60. (EEAI 10:5)  
(Spectrometer)

STEFICH, A. A.

See Culture

Increase filling out of comb foundation. Pchelovodstvo 30, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

STEPICHEV, A.V.

Airplanes over the fields of White Russia. Zashch. rast. ot  
vred. 1 bol. 7 no.9:14 S '62. (MIRA 16:8)

1. Starshiy inzh. otдела spetsprimeneniya Belorusskogo  
territorial'nogo upravleniya Grazhdanskogo vozdushnogo flota.  
(White Russia—Aeronautics in agriculture)  
(White Russia—Spraying and dusting in agriculture)

GAVRILOV, Mikhail Konstantinovich; SMIRNOV, Aleksey Andreyevich; STEPICHEV,  
Ivan Stepanovich; FRIDMAN, V.G., red.; SOROKINA, T.I., tekhn.red.

[Agriculture in Irkutsk Province during the past 40 years]  
Sel'skoe khoziaistvo Irkutskoi oblasti za 40 let. [Irkutsk]  
Irkutskoe knizhnoe izd-vo, 1957. 120 p. (MIRA 11:4)  
(Irkutsk Province--Agriculture)



STEPICHEV, Ivan Sergeyevich

[Struggle of the Irkutsk organization of the CPSU for the  
collectivization of agriculture] Bor'ba Irkutskoi organizatsii  
KPSS za kollektivizatsiiu sel'skogo khoziaistva, 1928-1930 gg.  
Irkutskoe knizhnoe izd-vo, 1958. 161 p. (MIRA 12:3)  
(Irkutsk Province--Collective farms)

FRISTUPIYUK, N.I.; STEPICHEVA, V.V.; YERMAKOVA, L.D.

Changes in the strength of inserts made of an exothermic mixture  
during their storage. Lit. proizv. no.4:46-47 Ap '62.

(MIRA 15:4)

(Risers (Founding))

STEPHEN, A.

15 4

the use of perchloric acid for determining silica in aluminosilicates. Zygmunt Marczenko and Alicja Stepień (Zakład Anal. Inst. Chem. Ogrodzi, Warsaw). *Chem. Anal. (Warsaw)* 3, 169-71 (1958).—In order to compare and evaluate the methods used for  $\text{SiO}_2$  (I) sepn., I was detd. in kaolin by: (a) 2-fold evapn. to dryness with  $\text{HCl}$  (II), (b) single evapn. to white fumes with  $\text{HClO}_4$  (III), and (c) evapn. to white fumes with  $\text{H}_2\text{SO}_4$  (IV). The samples were prepd. by fusion of 0.7 g. of kaolin with 3.5 g. of soda. The alloy was extd. with water and treated subsequently with (a) 20 ml. III and (b) 20 ml. IV. The solns. were evapd. on a sand bath. The residue was cooled, dild. with water, and the ppt. filtered. Silicic acid (V) was washed with dil. IV. I was detd. from the difference before and after evapn. of the residue with  $\text{HF}$  (VI) and IV. The residue after evapn. of I with VI and IV when using II or III was very small as compared to that obtained after treatment with II. The expts. convinced the authors that the ppt. most suitable for filtration is obtained by evapn. with III. Sepn. of I with the aid of III cuts time of analysis. The use of IV called for higher temp. for evapn. in the final step, about  $300^\circ$  as compared to below  $200^\circ$  in the case of III. III had no effect on the  $\text{CaO}$  and  $\text{MgO}$  detns. Z. Kurtova

Jan

OLSZAK, W.; STEPIEN, A.

Rheological effects in prestressed bound elements. *Bul Ac Pol  
tech* 10 no.3:[171]-[181] '62.

1. Department of Mechanics of Continuous Media, Institute of  
Fundamental Technical Problems, Polish Academy of Sciences,  
Warsaw. Presented by W.Olszak.

GISZAK, Wacław (Warszawa); STĘPIEN, Aleksander (Częstochowa)

Working conditions and load-carrying capacity of bond elements  
with a physically nonlinear core. Archiw inż lad 10 no.1:3-18 '64

MARCZENKO, Zygmunt; STEPIEN, Alicja

Concentration and colorimetric determination of titaniu, aluminum,  
iron, and magnesium in rock salt. Chem anal 5 no.2:247-259 '60.  
(EEAI 10:3)

1. Zakład analityczny im. M.Struszyńskiego Instytutu Chemii  
Ogólnej, Warszawa  
(Colorimetry) (Titanium) (Aluminum) (Iron)  
(Magnesium) (Salt)

STEPHEN, Alicja

LAND

MARCE LHO, Zygmunt; STEPHEN, Alicja

1. Department of Analytical Chemistry (Katedra Chemii Analizy) of the Warsaw Polytechnic School (for Marzenko); 2. Department of Analysis, Institute of General Chemistry (Zaklad analityczny Instytut Chemii Ogolnej), Warsaw (for Stephen)

Warsaw, Chemia analityczna, No 5, 1969, pp 705-11.

"Colorimetric Method of Determination of Trace Quantities of Vanadium with Formaldoxime".

L 08060-67

ACC NR: AT6033750

SOURCE CODE: PO/2541/66/010/001/0077/0080

AUTHOR: Staszewski, Andrzej (Master engineer); Stepien, Boguslaw (Master of arts)

ORG: none

TITLE: Vacuum evaporated Ni-Cr thin film resistors <sup>16</sup> <sub>05</sub>

SOURCE: Warsaw. Instytut Tele- i Radiotechniczny. Prace, v. 10, no. 1(34), 1966, 77-80

TOPIC TAGS: resistor, thin film resistor, evaporation, vacuum technology,  
*MICROELECTRONIC THIN FILM*

ABSTRACT: A description is given of the vacuum method for producing Ni-Cr thin film resistors for passive microcircuits. The method is expected to produce highly stable resistors with a low coefficient of temperature resistivity in a range of 100—50,000 ohms. Four experimental sample series have been produced and tested. Resistance films were deposited on 2 x 3 cm FK5 optically polished glass plates, using a Balzers 350K vacuum apparatus. To obtain the film an 80% Ni—20% Cr wire 1.6 mm in diameter was sublimated at 1100 ± 30C at a pressure of 5·10<sup>-5</sup> Torr for 12 min. Results were satisfactory. Orig. art. has: 1 table.

SUB CODE: 09/ SUBM DATE: 200ct65/

Card 1/1 *pl*

UDC: 621.316.84







STEPIEN, H.

TECHNOLOGY

PERIODICAL: GAZ, WODA I TECHNIKA SANITARNA. Vol. 32, no. 11, Nov. 1958

STEPIEN, H. Selection of heating, fuel and temperature parameters for heating systems; a condensed lecture. p. 416.

Monthly List of East European Accessions (EMAI) LC Vol. 8, No. 4.

April 1959, Unclass

Stepien, H.

Basic principles of development of heating connected with electric-power  
production1 p. 420p

ENERGIA ES ATOMTECHNIKA. (Energiagazdalkodasi Tudomanyos Egyesulet)  
Budapest, Hungary. Vol. 12, no. 7/8, July/August 1959

Monthly List of East European Accessions (KEAT) LC, Vol. 8, no.11  
November 1959  
Uncl.

STEPHEN, R.

Fundamental technical solutions in the Polish heating industry. p. 217

GAZ, WODA I TECHNIKA SANITARNA (Stowarzyszenie Markowo-Techniczne Inżynierów i Techników Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.  
Vol. 32, no. 5, May 1959

Monthly List of East European Accessions (LEAI) IC, Vol. 8, no. 9, September 1959  
Uncl.

STEPHEN, Henryk, mgr. inz.

Technological progress in the construction of heating networks.  
Gaz woda tech sanit 36 no.6:232-233 Je '62.

L 33920-65 EWP(m)/EWG(v)/EWT(1)/FS(v)-3/T  
ACCESSION NR: AP5002631

Pe-5/Pg-4/Po-4/Pq-4 GW  
P/0045/64/026/006/1045/1060

AUTHOR: Stephani, H.

TITLE: First and second approximation for field structures and for the motion equations of N charged gravitating mass points

SOURCE: Acta physica polonica, v. 26, no. 6, 1964, 1045-1060

TOPIC TAGS: relativity, field equation<sup>21</sup>, gravitation, Einstein field, Maxwell field, motion equation, N charged point, planetary orbit<sup>12</sup>

ABSTRACT: The presently known Lorentz-invariant methods for the first and second approximation of the Einstein field equations were improved and extended for application in conjunction with the coupled Einstein-Maxwell field, with special consideration to the second-order self-force. The solutions sought were intended to correspond to the motion and the field of N-charged, gravitating particles. The equations developed, when applied to a motionless particle, gave Schwarzschildian metrics; application of the second approximation developed yielded the correct perihelical rotation of planetary orbits. "The author thanks Professor D. Schmutzer for suggesting the work and for valuable discussions." Orig. art. has: 57 formulas and 4 figures.

Card 1/2

L 33920-65

ACCESSION NR: AP5002631

ASSOCIATION: Thoretisch-Physikalisches Institut der Universitat Jena (Theoretical  
Physics institute, Jena University)

SUBMITTED: 02Mar62

ENCL: 00

SUB CODE: GP, AA

NO REF SOV: 000

OTHER: 009

Card 2/2



KONORSKI, J.; STEPIEN, L.; BRUTKOWSKI, S.; LAWICKA, W.; STEPIEN, I.

Effect of partial removal of frontal and parietal lobes on  
conditioned motor reflexes. Neurol. neurochir. psychiat. polska  
2 no. 2:197-210 Mar-Apr 1952. (CLML 22:4)

1. Of the Department of Neuro-Physiology (Head--Prof. Jerzy  
Konorski, M. D.) of the National Institute of Experimental Biology  
imienia M. Nencki in Lodz.

STĘPIEN, Irena

Effect of excision of the frontal lobe on behavior in cats. Acta  
physiol Pol 5 no.1:109-110 '54. (REAL 3:7)

1. Zakład Neurofizjologii Instytutu Biologii Doświadczalnej im.  
M. Nenckiego, Łódź. Kierownik: prof. dr J. Konorski.  
(FRONTAL LOBE, physiology,

\*eff. of lobotomy on behavior in cats)

(BEHAVIOR,

\*eff. of frontal lobotomy in cats)

STĘPIEN, I.

Effect of post-traumatic epileptic seizures on motor conditioned reflexes in dogs. Acta physiol. polon. 8 no.3:531-532 1957.

1. Z Zakładu Neurofizjologii Instytutu Biologii Dosw. im. M. Nenckiego w Warszawie Kierownik: prof. dr J. Konorski.

(EPILEPSY, experimental,

traum., eff. on motor conditioned reflexes in dogs (Pol))

(REFLEX, CONDITIONED,

motor, eff. of exper. traum. epilepsy in dogs (Pol))

(MOVEMENT,

eff. of traum. epilepsy on conditioned motor reflexes in dogs (Pol))

STĘPIEN, I.; STĘPIEN, L.

Effect of unilateral injuries of the sensory-motor region of the brain on conditioned motor reflexes in dogs. Acta physiol. polon. 8 no.3: 532-534 1957.

1. Z Zakładu Neurofizjologii Instytutu Biologii Doświadczalnej im. M. Nenckiego w Warszawie Kierownik: prof. dr J. Konorski.

(BRAIN, physiology,

eff. of sensory-motor region inj. on conditioned motor reflexes in dogs (Pol))

(REFLEX, CONDITIONED,

motor, eff. of inj. of sensory-motor cerebral region (Pol))

(MOVEMENT,

eff. of inj. of sensory-motor cerebral region on conditioned motor reflexes in dogs (Pol))

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

3020. THE EFFECTS OF ABLATIONS OF THE SENSORI-MOTOR CORTEX ON INSTRUMENTAL (TYPE II) CONDITIONED REFLEXES. I. THE LESIONS OF SENSORY CORTEX IN DOGS - Stepień I. and Stepień L. Dept. of Neurophysiol., Nencki Inst. of Exp. Biol., Warsaw - BULL. ACAD. POL. SCI. CL. 2 1958, 6/7 (309-312) illus. 1

Experiments were performed on 9 dogs in which an alimentary instrumental conditioned reflex of lifting the foreleg and putting it on the food-tray was established to various acoustic stimuli. Some dogs were additionally trained to run through a simple maze, to climb onto a table or to go over a barrier to get food. Then the sensory areas I and II were ablated unilaterally in 2 dogs and bilaterally in others. After complete recovery (5-10 days after the operation) the animals were tested. It was found that the general behaviour of the dogs was unchanged and the locomotor conditioned reflexes were totally preserved. The operated animals showed, however, a great impairment of proprioception. They were neither able to go over a barrier nor to climb onto a table. These defects were partially compensated in the next few weeks. The instrumental conditioned reflex was abolished for 16-78 days in various dogs; it was, however, preserved in 2 dogs, in one of which only sensory area II was bilaterally removed and in another only small unilateral lesion of the foreleg sensory area was made. The general picture of disturbances after unilateral lesions was similar to that after bilateral ablations.

Wyrwicka - Warsaw

STEPIEN, I.; STEPIEN, L.; KONORSKI, J.

Functional role of the premotor area of the cerebral cortex in dogs. Acta physiol.polon. 11 no.5/6:886-887 '60.

1. Z Zakladu Neurofizjologii Inst.Biol.Dosw. im. M.Nenckiego  
Kierownik: prof.dr J.Konorski.  
(CEREBRAL CORTEX physiol)  
(REFLEX CONDITIONED)

STEPIEN, I.; STEPIEN, L.; KONORSKI, J.

The effects of unilateral and bilateral ablations of sensorimotor cortex on the instrumental (type II) alimentary conditioned reflexes in dogs. Acta biol exper 21:121-140 '61.

1. Department of Neurophysiology, Nencki Institute of Experimental Biology, Warsaw.

(DOGS) (BRAIN)





STEPIEN, J.

Essential oils of acclimatized and indigenous Labiatae in Poland. I. Turowska, J. Stepien, H. Timerskówna, and M. Lichkowska. *Polish Abstr. Chem.* 1, 117 (1949). The following data are recorded for essential oils from plants grown in Poland (W is water content and E is essential oil content of the plant material, both as g per 100 g; A, R, and C are the acid, ester, and acetyl values of the oil): *Salvia officinalis*, leaves, W 0.20, 12.21, R 2.12, 2.74 (dm 0.012, n<sub>D</sub><sup>20</sup> 1.461, [α]<sub>D</sub><sup>20</sup> +4°35' to +6°35', A 0.80, 0.50, R 1.41, 0.60, C 80.16-80.72), petioles, W 11.74, E 0.02 (dm 0.023, n<sub>D</sub><sup>20</sup> 1.474, [α]<sub>D</sub><sup>20</sup> +5°42'); *Nepeta cataria* var. *caturola*, leaves, W 14.53, E 1.79 (dm 0.033, n<sub>D</sub><sup>20</sup> 1.450, A 0.56, R 5.74, C 2.13); *Nepeta nuda*, side shoots, W 14.23, E 1.06 (dm 0.072, n<sub>D</sub><sup>20</sup> 1.474, [α]<sub>D</sub><sup>20</sup> -23°48', A 0.20, R 5.39, C 109.3); *Origanum vulgare*, side shoots, W 71.23, E 0.14; *Lavandula officinalis*, blue stems, W 11.5-13.9, E 1.25-2.15 (dm 1.845, n<sub>D</sub><sup>20</sup> 1.464-1.469, [α]<sub>D</sub><sup>20</sup> -7.3° to -8.7°, limonene acetate content 24.50-34.31%); *Mentha piperita*, W 10.70-17.20, E 1.03-2.66 (dm 0.873-0.903, n<sub>D</sub><sup>20</sup> 1.468-1.475, [α]<sub>D</sub><sup>20</sup> -20°35' to -22°40', menthol content 47.49-51.61%).

...; ...

The infiltration type of water catchment in a submontane river. p.229.

(Sov. LAKH. Vol. 17, No. 5, May 1957. Warszawa, Poland)

SC: Monthly List of East European Accessions (ELIA) 10. Vol. 6, No. 10, October 1957. Uncl.

DRABIK, Jan, mgr., inż.; POHL, Kazimierz, inż; STASIAK, Leszek, mgr., inż.;  
STEPIEN, Jerzy, mgr., inż.

Welded constructions of heavy railroad platform trucks. Przegl  
spaw 14 no.2:31-37 '62.

1. Centralne Biuro Konstrukcyjne Przemysłu Taboru Kolejowego

STĘPIEŃ, Józef

Partial gastric resection complicated by gangrene of  
the colon. Wiad. lek. 18 no. 21:Suppl.:65-66 15 N ' 65.

1. Z Oddziału Chirurgicznego Szpitala Miejskiego w  
Ostrowcu Świętokrzyskim (Ordynator: dr. med. L. Stankiewicz).

POLAND

WIELICZANKSI, Henryk and STEPIEN, Krystyna, of the Division of Internal Diseases (Oddzial Chorob Wewnetrznych) of the Hospital (Szpital) im. H. Wolf in Lodz (Ordynator: Dr. med. H. WIELICZANSKI)

"Physiopathology and Clinics of Aldosteronism."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 12, 18 Mar 63, pp 440-445.

Abstract: Authors review and summarize our knowledge of the chemistry and physiological action of aldosteron and the physiology, pathology, and clinical manifestations of aldosteronism, using Conn's tabulation of primary and secondary hyper- and hypoaldosteronism. Treatment is discussed and the best effects of aldosteron treatment are mentioned. Of the 32 references, 6 are Polish, one French, 2 German, and the others English.

- END -

1588, 2568

CSO: 2000-N

APPROVED FOR RELEASE: 08/26/2000

Vol. 48 No. 4

Feb. 25, 1954

Analytical Chemistry

Rapid determination of sulfides in blast-furnace slag.  
by J. Hendel. (1954).—Determ. of sulfide is based on the method described in C.A. 29, 1742. To 0.5 g. of finely ground sample add 200 ml. water, 15 ml. 0.1N I, and slowly 20 ml. of concd. HCl. After stirring for 2 min. titrate with 0.1N Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub>.  
F. J. Hendel

CIA-RDP86-00513R001653220014-7"

S/035/62/000/007/011/060  
A001/A101

AUTHOR: Stepien, E.

TITLE: On interstellar matter at large distances from the galactic plane

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 9, 1962, 30,  
abstract 0A241 ("Postepy astron.", 1961, v. 9, no. 4, 245 - 248,  
Polish)

TEXT: This is a review article which describes, in particular, the results  
of Munch and Zirin (see RZhAstr, 1961, 10A275). There are 11 references.

[Abstracter's note: Complete translation]

Card 1/1

STAPIEN, K.

On the amplification of cosmic magnetic fields. Postepy  
astronom 10 no.2:175-178 '62.

STAPIEN, K.

The spiral model of the galactic field. Postepy astronom  
10 no.3:293-299 '62.



STEPHEN, Kazimierz

Hydromagnetic waves and their part in the heating of the sun's  
atmosphere. Postepy astronomii no.2:123-145 '63.

GRUBISINSKI, S.; STEPEN, K.

Hypothetical structure of the galactic gaseous corona.  
Postepy astronomii no. 3: 215-220 '63.

STEPHEN, K.

Remarks on the cosmogony of our planetary system. Postepy  
astronom 11 no. 3: 223-226 '63.

GRZIEDELMISKI, S.; STEPICH, K.

On the cloudy structure of the galactic gaseous corona.  
Acta astronomica 13 no.3:143-156 '63.

1. Astronomical Observatory, University, Warsaw.

ETHELSON R.

Dust, radiation pressure, and origin of stars. Postepy  
astronom 12 no.1.38-41 '64.

Variability of magnetic stars. Ibid. 41 42

STILL, R.

Abstract of a paper presented at the 1964 Summer Session;  
explaining the internal polarization. - In: Symposium  
14 p. 281-85 '64

1. Conference on the structure of the atmosphere, University, Illinois.

STEPHEN, Karl Heinz

The Wolf-Rayet stars. Factory number 12 no. 2:86-86 164.

STAPIEN, K.

Polarization measurements in the north polar region.  
Postepy astronom 12 no.3:205-218 '64.



663.537.158K.33 73 11 11

hypothetical structure of the gas stream of the Taurus  
Postkey astronom 12 no. 2-176-177 1974

STEPHEN, Kazimierz

X-rays in astronomy. Postepy astronom 13 no.1:13-16 Ja-Mr  
'65.

STEPHEN, R.

On the mechanism acting in the Wolf-Rayet stars. Postepy  
astronom 13 no.2:125-127 '65.

A symposium of the International Astronomical Union of the  
selection of the site for the construction of astronomical  
observatories. Ibid.:132-137

ACC NR: AP6033312

SOURCE CODE: PO/0009/66/016/002/0151/0155

AUTHOR: Kubiak, M. ; Stepien, K.

ORG: Warsaw Astronomical Observatory

TITLE: Some remarks on ionization fronts in interstellar matter containing molecular hydrogen

SOURCE: Acta astronomica, v. 16, no. 2, 1966, 151-155

TOPIC TAGS: interstellar matter, hot star, molecular hydrogen, ionization, ionization front

ABSTRACT: A short discussion is presented of atomic processes which might be important in an ionization front passing through an interstellar cloud containing molecular hydrogen. All these processes are shown to occur simultaneously with no separation between ionization and dissociation fronts. It is shown that the addition of molecular hydrogen does not modify substantially the dynamic effects of the interaction of interstellar gas and the radiation field of hot stars. One front can exist in interstellar gas and its structure is determined mainly by processes two and five described in the original article. Orig. art. has: 2 figures, 5 formulas and 1 table.

Card 12/47 SUB CODE: 03, 20/SUBM DATE: 00Nov65/OTH REF: 005/

STAPIEN, L.  
3526

Klin. Chorob nerwowych. Akad. med. w Lodzi. Dalsze spostrzezenia nad leczeniem miastenii za pomoca obustronnego usuniecia przydanki z zatoki szyjno-tetnicze (sinus caroticus) Further observations on the treatment of myasthenia by the bilateral removal of adventitia from the carotid sinus Neurol., Neurochir. Psychiat. polska 1951. 1/4 (259-270) Tables 1 Eight cases of myasthenia were treated by bilateral removal of adventitia from the carotid sinus. In 2 cases there were very good results, in 4 distinct improvement, in 2 slight improvement. Follow up 5-31 mth. The most serious forms of myasthenia give the best results. Every case of myasthenia resistant to conservative treatment should be treated by this method. Experimental work is giving support for this kind of treatment. Thymectomy is rejected as being too dangerous and uncertain an operative method in myasthenia.

Ziemniewicz - Wroclaw

So: Excerpta Medica, Section VIII, Vol. 5, No. 9, September 1952

STEPIEN, L.  
1293

Z Kliniki neurochirurgii U. W. O chirurgicznym leczeniu zaburzen naczyniowo-ruchowych  
Surgical treatment of vasomotor disorders Polski Przegl. chir. 1951, 23/1 (1-34) Tables 4  
Illus. 7

A survey of the pathology and symptomatology of vasospastic disorders, and of 166 sympathetic denervations in a series of 168 patients since 1936. The results are as follows: In 91 patients with Buerger's disease (121 lumbar sympathectomies, 5 thoracic preganglionic sympathectomies and 34 peri-arterial sympathectomies): 46 cases showed great improvement, 34 cases definite improvement and 8 poor results with 3 postoperative deaths (widespread thrombo-angiitis obliterans). In 28 cases with causalgia (35 sympathectomies), 12 patients were cured, 6 considerably improved, 5 improved and 5 did not benefit from operation. Further observations concern: trophic ulcers of various aetiology (24 cases), scleroderma (6 cases), hemicrania (4 cases), dermatitis atrophicans (3 cases), Pink's disease (1 case) and others. Bibliography.

Ziemnowics - Giansk

So: Excerpta Medica, Section VIII, Vol. 5, No. 4, April 1952

KONORSKI, J.; STEPIEN, L.; BRUTKOWSKI, S.; LAWICKA, W.; STEPIEN, I.

Effect of partial removal of frontal and parietal lobes on  
conditioned motor reflexes. Neurol. neurochir. psychiat. polska  
2 no. 2:197-210 Mar-Apr 1952. (GLML 22:4)

1. Of the Department of Neuro-Physiology (Head--Prof. Jerzy  
Konorski, M. D.) of the National Institute of Experimental Biology  
imienia M. Nencki in Lodz.

STAPIEN, L.; BRYEZINSKI, J.; MEMPEL, E.; SREBRZYNSKA, J.

Disorders of dynamics of the higher nervous functions due to focal injury of the temporo - parieto - occipital contact area in the dominant cerebral hemisphere. Neurologia etc. polska 4 no.5:473-481 Sept-Oct 54.

(BRAIN, wound and injuries

higher nervous funct. in)

(CENTRAL NERVOUS SYSTEM, in various diseases

brain inj., higher nervous funct. in)

(WOUNDS AND INJURIES

brain inj., higher nervous funct. in)



T-10

POLAND/Human and Animal Physiology - Nervous System.  
Higher Nervous System. Behavior.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32233  
Author : Brutkowski, S., Konorski, J., Lawicka, W., Stepien, I.,  
Stepien, L.  
Inst :  
Title : Influence of the Removal of Frontal Poles of the Cerebral  
Cortex on Motor Conditioned Reflexes.  
Orig Pub : Acta biol. exptl., 1956, 17, No 1, 167-188

Abstract : The influence was studied of the removal of frontal poles  
(FP) in dogs on the motor conditioned reflexes (CR) of the  
so-called II type, which are specially-prepared motor  
combinations. Removal of G. proreus and G. orbitalis led  
to weakening of cortical inhibition (release of differen-  
tiation and conditioned inhibitor, appearance of inter-  
signal movements, developments according to a form of  
repetition) with practically-complete preservation of the

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POLAND/Human and Animal Physiology - Nervous System.  
Higher Nervous System. Behavior.

"APPROVED FOR RELEASE: 08/26/2000" CIA-RDP86-00513R001653220014-7"

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32233

positive CR. With a broader removal of FP (including G.  
sigmoides ant.), the animals originally were completely  
disoriented and both positive and inhibited CR were ab-  
sent in them; later, a tendency appeared toward perse-  
vering movements on the basis of significant impairment  
of the inhibited CR. After removal of FP, neuroses deve-  
lop slightly. Controlled removal of the parietal poles  
caused no indicated impairments. Seemingly, there are  
localized in FP some centers the neurons of which bear  
a special inhibiting function. By means of these cen-  
ters (usually intermediate), all developed inhibited  
reflexes are accomplished.

Card 2/2

STEPIEN L.  
STEPIEN, I.; STEPIEN, L.

Effect of unilateral injuries of the sensory-motor region of the brain on conditioned motor reflexes in dogs. Acta physiol. polon. 8 no.3: 532-534 1957.

1. Z Zakladu Neurofizjologii Instytutu Biologii Dosw. im. M. Nenckiego w Warszawie Kierownik: prof. dr J. Konorski.

(BRAIN, physiology,  
eff. of sensory-motor region inj. on conditioned motor re-  
flexes in dogs (Pol))

(REFLEX, CONDITIONED,  
motor, eff. of inj. of sensory-motor cerebral region (Pol))

(MOVEMENT,  
eff. of inj. of sensory-motor cerebral region on conditioned  
motor reflexes in dogs (Pol))

STEPIEN, Lucjan

Remote results of the treatment of Erb-Goldflam's myasthenia  
by bilateral denervation of the carotid sinus. Neur. &c.  
polska 9 no.4:485-491 J1-4g '59.  
(MYASTHENIA GRAVIS surg)  
(CAROTID SINUS innervation)

POL/7-60-22-36/46

AUTHOR: Stepień, Lucjan

TITLE: Without Oxygen There is no Life.

PERIODICAL: Skrzydlata polska, 1960, No. 22, Supplement "Przegląd  
lotnictwa cywilnego" 1960, No. 11, pp. 1 and 4

TEXT: The author criticizes the Dział techniczny i zaopatrzenia APRL  
(Technical and Supply Section APRL) for not supplying oxygen cylinders on time  
for summer flights. He points out that most of the time oxygen bottles are  
with the Supply Section and ideal meteorological conditions are wasted. As an  
example he describes a flight made by a glider pilot of the Tatra Aeroclub, who  
could have broken a number of long distance records, but owing to lack of oxygen  
was forced to land. ○

Card 1/1

CHORĄŻYNA, H.; STEPIEN, L.

Effect of removal of various segments of the auditory analyzer  
on fresh memory of auditory stimuli in dogs. Acta physiol. polon.  
11 no.5/6:672-674 '60.

1. Z Zakładu Neurofizjologii Inst. Biol. Dosw. im. Nenckiego w  
Warszawie Kierownik: prof. dr J. Konorski,

(HEARING) physiol)  
(MEMORY)

STAPIEN, I.; STAPIEN, L.; KONORSKI, J.

Functional role of the premotor area of the cerebral cortex in dogs. Acta physiol.polon. 11 no.5/6:886-887 '60.

1. Z Zakladu Neurofizjologii Inst.Biol.Dosw. im. M.Nenckiego  
Kierownik: prof.dr J.Konorski.  
(CEREBRAL CORTEX physiol)  
(REFLEX CONDITIONED)

SELECKI, Borys; STAPIEN, Lucjan

Speech disorders in focal lesions of the region bordering the temporal, parietal and occipital lobes of the dominant hemisphere. Rozpr.wydz. nauk med. 6 no.2:55-71 '61.

1. Z Panstwowego Instytutu Psychoneurologicznego w Pruszkowie Dyrektor: prof. dr med. Zygmunt Kuligowski i z Zakladu Neurochirurgii Polskiej Akademii Nauk w Warszawie Kierownik: prof. dr med. Lucjan Stepień.

(SPEECH DISORDERS etiol) (BRAIN dis)

STAPIEN, Lucjan; SIERPINSKI, Stanislaw

Effect of focal lesions of the brain on recent visual and auditory memory in men. Rozpr.wydz.nauk med. 6 no.2:203-226 '61.

1. Z Zakladu Neurochirurgii Polskiej Akademii Nauk Kierownik: prof. dr med. L. Stepien.

(BRAIN wds & inj) (MEMORY) (VISUAL PERCEPTION)  
(HEARING)



CHORAZYNA, H.; STEPIEN, L.

Impairment of recent memory of the auditory stimuli after bilateral  
ablations of sylvian gyri in dogs. Bul Ac Pol biol 9 no.3:117-120  
'61. (EEAI 10:9/10)

1. Department of Neurophysiology, M. Nencki Institute of Experimental  
Biology, Polish Academy of Sciences. Presented by J. Konorski.

(DOGS) (HEARING) (REFLEXES) (BRAIN)

STEPILN, I.; STEPLEN, L.; KONONSKI, J.

The effects of unilateral and bilateral ablations of sensorimotor cortex on the instrumental (type II) alimentary conditioned reflexes in dogs. Acta Biol Exp 21:121-140 '61.

1. Department of Neurophysiology of the Nencki Institute of  
Experimental Biology in Warsaw.  
(REFLEX CONDITIONED) (CEREBRAL CORTEX physiol)

CHORAZYNA, H.; STEPIEN, L.

Impairment of auditory recent memory produced by cortical lesions in dogs. Acta Biol Exp 21:177-187 '61.

1. Nencki Institute of Experimental Biology, Department of Neurophysiology, Warsaw.

(CEREBRAL CORTEX physiol)

(MEMORY)

STEPIEN, L. (Warszawa, Oc2ki 6)

Report from the Second International Congress of Neurosurgeons,  
held in Washington D.C., October 14-20, 1961. Neurol neurochir  
psych 12 no.4:636-638 J1-Ag '62.

\*

CHORAZYNA, H.; STEPIEN, L.

Effect of bilateral sylvian gyrus avlations in auditory conditioning in dogs. Bul Ac Pol biol 11 no.1:43-45 '63.

1. Department of Neurophysiology, Nencki Institute of Experimental Biology, Polish Academy of Sciences, Warsaw.  
Presented by J. Konorski.

1 45506-65

ACCESSION NR: AP5014781

PO/0002/64/000/004/0079/0094

AUTHOR: Stepien, Lucjan (Professor, Director)(Warsaw)

TITLE: Scientific activity at the Institute of Neuro-Surgery in the 1959-1963 period

SOURCE: Nauka Polska, no. 4, 1964, 79-94

TOPIC TAGS: neurology, nervous system, brain

Abstract: The article reports on the work done at the Institute in the field of various types of nervous disorders, namely: 1) disorders in higher-order nervous activity after focal damage in the frontal brain area (inhibition of the restraining process, mental distraction and lack of orientation), 2) patho-physiological mechanisms of impaired speech after focal damage in the cerebral hemispheres (audio-verbal reaction, video-verbal reaction, automatic verbalization, audio-gesticulative reaction), 3) disturbance of recent memory due to focal brain damage, 4) disturbance of rhythmic processes due to focal brain damage; in addition, the significance of the non-dominating cerebral hemisphere was studied and also disorders in the sense of touch, both at the surface and internally, after focal brain damage.

Card 1/2

L 45506-65

ACCESSION NR: AP5014781

ASSOCIATION: Zaklad Neurochirurgii PAN, Warsaw (Institute of Neurosurgery at the Polish Academy of Sciences)

SUBMITTED: 00Feb64

ENCL: 00

SUB CODE: 1S

NO REF SOV: 000

OTHER: 038

JPRS

Card 2/2 7118

STEPIEN, Lucjan, Professor

The Research Center for Neurosurgery of the Polish Academy of Sciences in 1958-1960. Review Pol Academy 9 no.4:27-31 O-D '64.

1. Head, Center for Neurosurgery of the Polish Academy of Sciences, Warsaw. Submitted March 1964.



STAPIEN, Lucjan; MEMPEL, Eugeniusz

Hallucinations and illusions in temporal lobe epilepsy.  
Neurol. neurochir. psychiat. Pol. 15 no.3:385-389  
My-Je '65.

1. Z Kliniki Neurochirurgii AM w Warszawie i z Zakladu  
Neurochirurgii Polskiej Akademii Nauk w Warszawie  
(Kierownik: prof. dr. med. L. Stepień).

STEPIEN, Lucjan; MAREK, Eugeniusz

An analysis of the results of surgical treatment in patients with temporal lobe epilepsy. Neurol. neurochir. psychiat. 1965. 15 no.3:463-466 My-Je '65.

1. Z Kliniki Neurochirurgii AM w Warszawie (Kierownik: prof. dr. med. L. Stepien) i z Zakladu Neurochirurgii Polskiej Akademii Nauk (Kierownik: prof. dr. med. L. Stepien).

NIEWIADOMSKA, Maria; SLOWIK, Tadeusz; STEPIEN, Lucjan; TRZEBICKI, Jacek

A case of cerebral angioma with temporal lobe epilepsy. Neurol. neurochir. psychiat. Pol. 15 no.3:481-484 My-Je '65.

1. Z Oddzialu Neurologicznego (Ordynator: doc. dr. I. Wald) i z Pracowni Radiologicznej Szpitala dla Nerwowo i Psychicznie chorych w Pruszkowie (Kierownik: dr. med. P. Kozlowski) i z Zakladu Neurochirurgii Polskiej Akademii Nauk (Kierownik: doc. dr. S. Sierpinski).

1954

[illegible]

Department of Internal Affairs, Division of Administration and Auditing  
 Conditions in 1962

Veritas, ~~Associação de Estudantes Policiais do Rio de Janeiro~~  
~~Associação dos Policiais Federais do Brasil~~, Vol. 1, No. 1,  
1987, pp. 15-16.

Abstracts: Summary articles? Auditory discrimination, letter identification, reading, and short-term memory in dogs is laterally related to the lateral temporal cortex in dogs is analyzed. The experimental procedures, establishment of conditions, results and summary are described. Results are discussed. 2 diagrams; 6 references, mostly in German.

STEPHEN, M.

S

21

Polarographic Determination of Molybdenum in Steel. M. Stephen. (Prace Badawcze Głównego Instytutu Metalurgii i Odlewnictwa, 1950, No. 5, pp. 89-91). [In Polish]. A new method of polarographic determination of molybdenum in steel has been worked out. A sample is dissolved in a mixture of hydrochloric and nitric acids (for stainless steel sulphuric acid is used). Molybdenum sulphide is precipitated by passing a stream of hydrogen sulphide through the solution, and it is then oxidized to sulphomolybdate with bromine. After coagulation, sulphuric acid (1:1) is added and polarographic determination takes place at potential  $E = -0.25$  V. The product of reduction is unknown. The percentage of molybdenum can be calculated in two ways: (1) Indirectly by comparing with the standard curve or (2) directly by using a formula for determining the value of constant 'I' for the diffusion current. In the case of molybdenum content in the 0.1-0.5% range, the error does not exceed  $\pm 10\%$ . The analysis takes about 6 hr. —V. G.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

Distr: hE2c(j)

✓ Chromatographic method of identification of some vulcanization accelerators. Robert Gaczyński and Maria Stepien (Inst. Rubber Ind., Warsaw). *Przemysł Chem.* 38: 571-5 (1959).—The method deals with identification of 2-mercaptobenzothiazole (I), 2,2'-dithiodibenzothiazole (II), *N,N*-diethyl-2-benzothiazolesulfenamide (III), bis(dimethylthiocarbamoyl) disulfide (IV), Zn ethylphenyldithiocarbamate (V), 1,3-diphenylguanidine (VI), and of the antioxidant phenyl-2-naphthylamine (VII) in rubber mixts. and vulcanizates. The sample was extrd. with acetone (4 hrs.). For acidic accelerators I, II, IV, and V, the solvent was a mixt.: iso-PrOH:25% NH<sub>4</sub>OH:PhCl = 45:10:45; for basic accelerators III and VI, and for the antioxidant VII, BuOH:AcOH:H<sub>2</sub>O = 4:1:5. I-VII were identified by color reactions: I and II with BK(NO<sub>3</sub>), 1% soln.; III, ninhydrin 1% acetone soln.; IV, CuSO<sub>4</sub> 5% soln. for rubber mixts., and ninhydrin 1% acetone soln. for vulcanizates; VI, bromophenol blue; VIII, *p*-nitroaniline hydrochloride + NaNO<sub>2</sub>. Circular paper chromatography was applied. Methods of sepn., and a discussion of whether the detected product was originally present or is a decompn. product, are given. The time of extrn. and analysis for I-VII present together in one sample is 7 hrs. I. Dobrucki

3  
1-JAS(NB)  
1-JAS(MAY)  
1

STEPIEN, Maria; GACZYNSKI, Robert

Determination of mercaptobenzithiazole (Accelerator II) and 2-benzothiazyl disulphide (Accelerator DM) by paper chromatography. Chem anal 6 no.6:1045-1049 '61.

1. Institute of Rubber Industry, Warsaw.

STEPIEN, Maria; SZEWCZYKOWSKI, Jerzy

On the problem of the symptomatology of acute isonicotinic acid hydrazide poisoning. Report of 3 cases. Gruzlica 29 no.9:815-820 S '61.

1. Z Oddziału Neurologicznego Państwowego Szpitala dla Nerwów i P  
Psychicznie Chorych im. prof. Jana Mazurkiewicza w Pruszkowie Ordynator:  
dr med. I. Wald Dyrektor: dr med. F. Kaczanowski.

(ISONIAZID toxicol) (NEUROLOGICAL MANIFESTATIONS)



STAPIEN, Maria

Relapse face shingles after heavy skull injury. Neurol neurochir  
psych 12 no.1:131-133 Ja-F '62.

1. Panstwowy Szpital dla Nerwowo i Psychicznie Chorych, Pruszkow;  
(Dyrektor: dr med. F. Kaczanowski) Oddzial neurologiczny (Ordynator:  
dr med. B. Stepień).

STEPIEN, Maria

Recurrent herpes zoster of the face after a severe cranial injury.  
Neurol. neurochir. psychiat. pol. 12 no.1:131-133 '62.

1. Panstwowy Szpital dla Nerwowo i Psychicznie Chorych w Pruszkowie  
Dyrektor: dr med. F. Kaczanowski Oddzial neurologiczny Ordynator:  
dr med. B. Stepien[deceased].

(FACE dis) (SKULL wds & inj)  
(HERPES ZOSTER case reports)

POLAND

PRZEBICKI, Jacek and STEPIEN, Maria, Radiological Laboratory (Pracownia Radiologiczna) (Director: Dr. med P. KOZLOWSKI) of the Psychological Institute (Instytut Psychologiczny) (Director: Prof. Dr. med. Z. W. KULIGOWSKI) in Pruszkow and the Neurological Division (Oddzial Neurologiczny) ("Ordynator": Dr. med. I. WALB) of the Hospital for Nervous and Psychic Disorders (Szpital dla Nerwowo i Psychicznie Chorych) in Pruszkow (Director: Dr. med. F. KACZANOWSKI)

"On the So-called Baastrup Disease."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 4, 21 Jan 63, pp 136-139.

Abstract: [Authors' English summary modified] Authors found 20 cases of Baastrup disease among 1320 x rayed patients. No close relation between the radiological signs and clinical picture of the disease were found, and suggest that these disorders are a syndrome of non homogeneous etiology appearing mostly in the course of rheumatic and rheumatoid changes. Hence the use of "disease" rather than "syndrome." Nine references, 4 French, 3 German, one each English and Polish.

1/1

... ..

Military members of the Central Technical Organization. Przegł  
techn 85 nr. 19.8 14 Spina.

STAPIEN, W.

Stepien, W.; Szkudlarek, A.

"An analysis of the trend of accidents and the technique of industrial safety in the clothing industry", p. 14 (Odzież, Vol. 4, no. 1, Jan. 1953, Lodz)

Vol. 3, No. 3

SO: Monthly List of East European Accessions,/Library of Congress, March 1954, Uncl.

STOPIEN, W.

"Organizational problems of preventing damage." p. 57. (ODZIEZ, Vol. 4, no. 3, Mar. 1953, Lodz, Poland)

See: Monthly List of East European Accessions, L. S., Vol. 3, No. 5, May 1951, Incl.

STAPIEN, W.

"Fireproofing Warehouses in Establishments of the Clothing Industry." p.191  
(OD:IEZ Vol. 4, no. 9, Sept. 1953 Lodz, Poland)

SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

STEPIEN, W.

"Expanding Socialistic Competition in the Field of Work Safety and Health." p.210

"New Models and Higher Quality in the Year 1954." p.211

(ODZIEZ VOL. 4, No. 10, Oct. 1953 Lodz, Poland)

SO: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/ Uncl.



STELIEN, A.

STELIEN, W.; ORZDOLAK, A.

"Organization and field of activity of the Work Safety Service in the clothing industry."  
p. 249. (Gazeta, Vol 4, no. 12, Dec 53, Lodz)

SO: Monthly List of East European Accessions, Vol 3 No 6 Library of Congress Jun 54 Uncl

100

"The ... .. (2-11-1954) ... ..

Cite: *Journal of Democracy*, 1: 2, Vol. 1, No. 12, Dec. 1973

STEFAN, J.

"Evacuation of factory workers during a fire." p. 161. (OCHRONA PRACY;  
BEZPIECZEŃSTWO I HIGIENA PRACY, Vol. 1, no. 12, Dec. 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 5, May 1953, Uncl.

STUPIN, W.

'Status of the fire hazard in the clothing industry in 1952-1953.' p.195.  
(ODZISE. Vol. 5, No. 10, Oct. 1954. Lodz, Poland)

SO: Monthly List of East European Acquisitions. (FEAL). LC. Vol. 4, No. 4.  
April 1966. Uncl.

STEPIEN, W.

From the activities of fire prevention posts in clothing factories.  
p.175

Vol. 6, no. 9, Sept 1955  
ODZIEW  
Lodz

SOURCE: Monthly list of East European Accessions (EEAL) LC Vol. 5, no 2  
February 1956

STERIEN, W.

STERIEN, W. Organization of the evacuation of people from factories threatened by fire. p. 258. Vol. 7, no. 10, Oct. 1956. CDZIE. Lodz, Poland.

SCIENT: East European Accessions List (EAL) Vol. 6, No. 4--April 1957

STEPHEN, W.

The preparation of industrial plants for defense against fire under the conditions of the Local Air Defense. p. 179.  
(ODZIELZ. Vol. 8, no. 7, July 1957, Lodz, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.  
Uncl.

STURPIA, W. ; KUCIOWA, E.

Analysis of the structure of employment in clothing enterprises. p. 190.

DOI W. (Centralne Zarzady Przemyslu Odziewiarskiego, Olziazowego i  
Pomocznizowego) Lodz, Poland.  
Vol. 10, no. 9, Sept. 1959.

Monthly List of East European Accessions, (WEAT) 12, Vol. 2, no. 2, Feb. 1959.

Incl.



GORDON, Jan; STEPIEN, Zenon (Warszawa)

Shortening of production cycles and the resulting technical  
and economic effects; experiences of the Industrialized  
Construction Enterprise, Warsaw. Przegl budowl i bud mieszk  
33 no.1:44-46 Ja '61

STEFAN, M.

Main technical solutions in the field of distance heating in Poland. p. 249.

INSTITUTUL. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din  
Romania si Ministerul Energiei Electrice si Industrii Electrotehnice)  
Bucuresti, Romania  
Vol. 7, no. 6, June 1977.

Monthly list of Eastern European Accession Index (SEAI) IC vol. 5, no. 11  
November 1979  
Incl.

KONORSKI, J.; STEPIENS, L.

Effect of the pressoreceptor function of the carotic sinns on somatic muscles. Neurologia & polska 2 no. 5:521-540 Sept-Oct 1952. (CIAM 24:1)

1. Of the Department of Neuro-Physiology (Head--Prof. J. Konorski, M.D.) of the State Institute of Experimental Biology imienia Nencki in Lodz.

CA STEPICHEV, A.A.

Mutual transformation of rings and linear polymers. I.  
Calorimetric study of the polymerization reaction of  $\epsilon$ -caprolactam. S. M. Skuratov, A. A. Stepikev, and R. N. Kanavskaya (Univ. Moscow). *Kolloid. Zhur.* 14, 185-91 (1952). — The total heat  $Q$  of reaction of  $\epsilon$ -caprolactam with  $H_2O$  to give polymer  $11[H(N(CH_2)_5CO)_2OH]$  is 28.5-29.0 cal./g. independently of temp. and the amt. of  $H_2O$  ( $x\%$ ) added. The heat evolution starts after a latent period of 40-60 min. at  $230^\circ$  and 90 min. at  $210^\circ$ . Then the rate of heat evolution increases to a max. which is sharper and occurs earlier, the greater is  $x$ . Thus the max. rate was observed during the 3rd hr. (54% of  $Q$ ) at  $x = 2\%$ , 5th hr. (31% of  $Q$ ) at  $x = 1\%$ , and 6th hr. (17.5% of  $Q$ ) at  $x = 0.5\%$  at  $230^\circ$ ; at  $210^\circ$  it occurred during the 6th hr. at  $x = 2\%$ . A differential calorimeter was built of 2 identical hollow Ag blocks filled, one with caprolactam and the other with KCl, provided with elec. heaters and thermocouples, and immersed in an oil thermostat. I. I. Birkman